

## Emergency Escape & Rescue Windows Requirements for Bedrooms/Sleeping Room Handout

Developed by City of Marshalltown Rental Inspection Office with assistance of the City of Marshalltown Building Official and Fire Marshal and based on an educational resource packet from the Vermont Division of Fire Safety



This handout is designed to help landlords determine if their windows meet rescue/egress requirements or if they need to replace one, but is not all-inclusive. However, for a final determination, the housing inspector will need to measure the largest window in each bedroom/sleeping room to see if window meets requirements or not.

And if you do need to replace, please remember to contact the housing inspector <u>before</u> replacing the window to set up a time for the inspector to measure the new window prior to the installation. Then if it is not the correct size, you may be able to return it for a full refund and re-order the window. Thank you.



All new rentals must have one window that meets rescue/egress requirements in every bedroom/sleeping room. For existing rentals in good standing, anyone replacing any window in a bedroom/sleeping room must then install a window that meets rescue/egress requirements even if another window in the room is an original window.

The City of Marshalltown Sec. 15.5-26. Housing quality standards. states the following regarding bedroom windows: (j) Access; Performance requirement. The dwelling unit shall be usable and capable of being maintained without unauthorized use of other private properties and the building shall provide an alternate means of egress in case of fire, such as fire stairs or egress through windows. Every sleeping room below the fourth story shall have at least one operable window with a finished sill height not more than 44 inches above the floor or an exterior door approved for emergency egress or rescue. Each window in a sleeping room shall have a minimum net clear opening of 5.7 square feet. The minimum net clear height shall be not less than 24 inches. The minimum net clear width shall not be less than 20 inches.\*

Nothing is more important than getting out of a burning structure as quickly as possible. Code requires that there are two means of egress from a bedroom/sleeping room – one can be through the house and the other either through a door or a window that opens directly to the exterior.

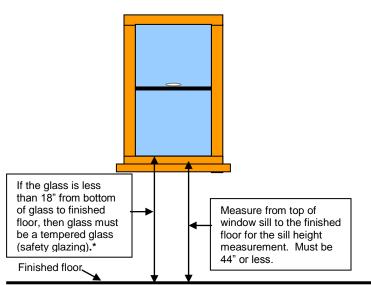
In a house fire, the basement stairs could be blocked or there could be fire with thick, black smoke racing down the hallway to a dead-end bedroom and the windows that are large enough for you to escape – and for firefighters to enter – become an occupant's essential lifesaving equipment.

Few of us think of windows as lifesaving equipment – but they are. When you need to escape a house fire or other disaster, or when rescue personnel need to enter – the right size egress window can make the difference between life and death.

These all-important secondary means of escape are called either egress, rescue or escape windows. And it is why the International Building Code, International Fire Code as well as other applicable codes have this requirement. Every second counts and all that you can do to ensure that these minimum standards are met can save a life.

The remaining information is a brief outline you can use to help when measuring or even purchasing egress windows.

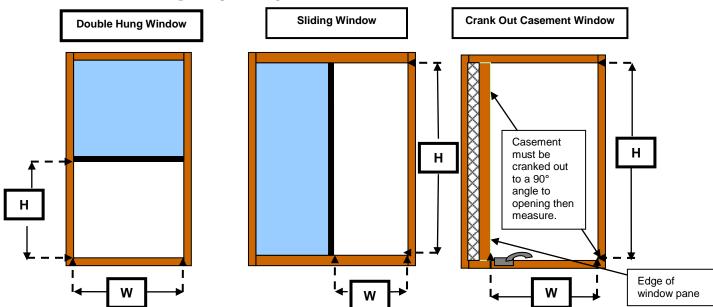
## **How to Measure Sill Heights:**



For information regarding window glass requirements when glass is within 18" of the finished floor, please speak to the housing inspectors.

Please note – if you are considering adding a bedroom such putting one in the basement, you must first submit a detailed drawing for the City of Marshalltown Building Official to review prior to any work. This article does not have information regarding adding bedrooms.

## **Emergency Escape & Rescue Windows Worksheet**



Measure each bedroom/sleeping room's largest window. Find the type of window above that is in the bedroom and you would measure that window's white area's (net clear openable area) height and width and fill out the following to determine it's square footage.

- 1. Measure the net clear openable height [H]:\_\_\_\_\_\_\_\_. Is it net clear openable height at least 24"? Y[ ] N[ ]
- 2. Measure the net clear openable width [W]:\_\_\_\_\_\_". Is it net clear openable width at least 20"? Y[ ] N[ ] a. If you checked no for one or both, then you will need to replace at least one window for this bedroom. If you checked yes for both, proceed.
- 3. Determine the clear net openable area: [H]:\_\_\_\_\_\_ x [W]:\_\_\_\_ = \_\_\_\_/144 = \_\_\_\_ sq ft
  - a. If less than 5.7 sq ft, then you will need to replace at least one window for this bedroom. If 5.7 square feet or greater, then proceed.
- 4. Measure from the top of the window sill to the finished floor\_\_\_\_\_\_ Is it 44" or less? Y[ ] N[ ]
  - a. If less than 18" from bottom edge of glass to the finished floor, then glass needs to be a tempered glass (safety glazing).

If net clear openable area is 5.7 sq ft or greater and meets minimum widths and heights as well as having a sill height of less than 44", then window meets rescue/egress requirements.

Location	Height	Х	Width	=	Total square inches	/144	=	Total square feet
Bedroom #1		Χ		=		/144	=	
Bedroom #2		Χ		=		/144	=	
Bedroom #3		Х		=		/144	=	
Bedroom #4		Х		=		/144	=	

Below is a table you can use when you are purchasing a window to meet these code requirements. Just measure the openable area of the window as described above and compare the measurements to those in the table. If they match one of the sets, then the window likely meets code but please remember to have us measure before installing. Information taken from *Emergency Escape & Rescue Windows* by Ron Darville, Senior Plans Examiner, El Segundo, CA Minimum Width/Height Requirements for Emergency Escape and Rescue Window (inches\*)

\*1 inch = 25.4 mm

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Width	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25	25.5	26	26.5	27
Height	41	40	39.1	38.2	37.3	36.5	35.7	34.9	34.2	33.5	32.8	32.2	31.6	31	30.4
Width	27.5	28	28.5	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5	34	34.2
Height	29.8	29.3	28.8	28.3	27.8	27.4	26.9	26.5	26.1	25.7	25.3	24.9	24.5	24.1	24

<sup>\*</sup>Some requirements may be more restrictive than building code requirements.